

Assessing Adults With ADHD and Comorbidities

Approximately 4.4% of US adults have attention-deficit/hyperactivity disorder (ADHD).¹ Yet, this condition remains underdiagnosed as only 10.9% of adults with ADHD receive treatment.¹ To complicate diagnosis, adults with ADHD often have comorbid psychiatric disorders, which may mask the symptoms of ADHD.

ADHD Diagnostic Criteria

Although ADHD is a developmental disorder, up to 85% of children with ADHD are at risk for having the disorder as adults.¹ The current diagnostic criteria² for ADHD were developed for children, and modifications are necessary to address the progression of the disorder into adulthood.³ For example, unlike in children, gross motor hyperactivity is relatively rare in adults. Adults with ADHD more often exhibit symptoms of impulsivity, inattention, and/or executive dysregulation, such as high distractibility, impulsive decision making, poor time management, difficulty following directions, working memory problems, excessive speeding while driving, difficulty engaging quietly in leisure activities, and poor follow-through.

Assessment of Adult ADHD

When assessing adults for ADHD, the following recommendations may be helpful: (1) obtain patients' self-report on current functioning (using only 4 of the DSM-IV-TR criteria) as well as functioning before 16 years of age, (2) obtain corroboration of symptoms and evidence of impairment in several major life activities, (3) obtain evidence of a chronic course of illness without periods of remission, (4) define impairment relative to the average person, (5) explain impairment that developed after 16 years of age, (6) use rating scales for adult ADHD, and (7) rule out a low IQ, learning disabilities, and other co-occurring disorders. Comorbid disorders are common in ADHD and can make accurate diagnosis difficult.^{3,4}

Adult ADHD and Comorbidities

Many adults with ADHD also have co-occurring psychiatric disorders, including anxiety (47%), mood (38%), impulse control (20%), and substance use disorders (SUD, 15%).¹ Symptoms of ADHD can be concealed by more robust symptoms of these

co-occurring conditions. Conversely, comorbid anxiety and learning disorders can be obscured by more obvious ADHD symptoms.

Some comorbid disorders may be a direct reflection of the impact of ADHD symptoms; for example, poor academic achievement owing to ADHD may lead to anxiety. Additionally, other frequently co-occurring conditions, such as depression, share common environmental risk factors with ADHD.⁵

Comorbidities may differ in frequency between adults and children with ADHD. Adults with ADHD are more likely than children to have one or more anxiety disorders, SUD, personality disorder, and social phobia, but children are more likely to have comorbid oppositional disorder and separation anxiety.⁶

Adults with undiagnosed ADHD and comorbidities are likely to seek treatment because of problems associated with a co-occurring disorder, not because of ADHD symptoms. Further, the presence of comorbid psychiatric conditions can affect the presentation and course of ADHD and may require treatment independent from that of ADHD. Therefore, clinicians should screen patients with ADHD for other DSM-IV disorders as well as assess patients with other DSM-IV disorders for ADHD.

Take-Home Points

Adults with ADHD often present with different impairments than children with the disorder. Accurately assessing adults for ADHD requires using different criteria than are currently available. Additionally, comorbid psychiatric disorders may complicate the clinical presentation of ADHD. Thus, clinicians should thoroughly screen adults for ADHD as well as for mood, anxiety, substance use, personality, and impulse control disorders to begin to comprehensively address all conditions and improve patients' overall outcomes.

Disclosure of off-label usage: Dr. Barkley has determined that, to the best of his knowledge, no investigational information about pharmaceutical agents that is outside US Food and Drug Administration-approved labeling has been presented in this activity.

REFERENCES

1. Kessler RC, Adler L, Barkley R, et al. The prevalence and correlates of adult ADHD in the United States: results from the National Comorbidity Survey Replication.

- Am J Psychiatry*. 2006;163(4):716-723.
2. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision*. Washington, DC: American Psychiatric Association; 2000.
3. Barkley RA, Murphy KR, Fischer M. *ADHD in Adults: What the Science Says*. New York, NY: Guilford Press; 2008.
4. Barkley RA. *Attention-Deficit Hyperactivity Disorder. 3rd ed: A Handbook for Diagnosis and Treatment*. New York, NY: Guilford Press; 2005.
5. Faraone SV, Biederman J. Do attention deficit hyperactivity disorder and major depression share familial risk factors? *J Nerv Ment Dis*. 1997;185(9):533-541.
6. Biederman J, Faraone SV, Spencer T, et al. Patterns of psychiatric comorbidity, cognition, and psychosocial functioning in adults with attention deficit hyperactivity disorder. *Am J Psychiatry*. 1993;150(12):1792-1798.

This ACADEMIC HIGHLIGHTS UPDATE section of The Primary Care Companion to The Journal of Clinical Psychiatry is derived from the ACADEMIC HIGHLIGHTS "ADHD and Comorbid Disorders in Adults" (*J Clin Psychiatry* 2008;69(8):1328-1335). This report was prepared by the CME Institute of Physicians Postgraduate Press, Inc., and supported by an educational grant from Eli Lilly and Company.

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Financial disclosure: Dr. Barkley is a consultant for Eli Lilly, Shire, and Abbott; has received grant/research support from UC-Davis and NIMH; has received honoraria from CADDRA, the Learning Disabilities-Attention Deficit Disorder Program of North Carolina, ThedaCare, NASP, MCW, NEEI, Egleston Children's Hospital, the Spanish Child Psychiatry Association, the Portugal ADHD Foundation, the Brazil ADHD Parent's Association, the Uruguay ADHD Parent's Association, and the Argentina Mental Health Conference; is a member of the speakers/advisory boards for Eli Lilly, Shire, Novartis, and Janssen; and has received other financial or material support from Guilford Publications, Compact Clinics, NEEI, and J&K Seminars. Dr. Newcorn is an advisor/consultant for Eli Lilly, McNeil, Shire, Novartis, Lupin, Sanofi-Aventis, Abbott, and Psychogenics; has received grant/research support from Eli Lilly and McNeil; and has received honoraria for speaking from Eli Lilly, Shire, and McNeil.

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After studying the ACADEMIC HIGHLIGHTS UPDATE, you should be able to:

- Make an accurate diagnosis of ADHD in adults who present with a constellation of symptoms of inattention, anxiety, hyperactivity, and impulsivity and effectively differentiate between ADHD and its comorbid psychiatric disorders.

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1. **The DSM-IV-TR diagnostic criteria for attention-deficit/hyperactivity disorder (ADHD) are adequate to assess children, adolescents, and adults for ADHD.**
 - a. True
 - b. False

For Pretest answer and Posttest, see pages 42–43.

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- 1. When assessing adults for attention-deficit/hyperactivity disorder (ADHD), clinicians should do all of the following *except*:**
- a. Obtain corroboration of patients' symptoms and impairment
 - b. Screen for other psychiatric conditions
 - c. Use the current diagnostic criteria
 - d. Use rating scales for adult ADHD

Answer to Pretest: 1. b



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